

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference PHNL030978WO	FOR FURTHER ACTION		See item 4 below
International application No. PCT/IB2004/051353	International filing date ( <i>day/month/year</i> ) 02 August 2004 (02.08.2004)	Priority date ( <i>day/month/year</i> ) 08 August 2003 (08.08.2003)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant KONINKLIJKE PHILIPS ELECTRONICS N.V.			

<p>1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p>In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.</p>	<p>3. This report contains indications relating to the following items:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 15%; text-align: center;">Box No. I</td> <td style="width: 70%;">Basis of the report</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;">Box No. II</td> <td>Priority</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;">Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;">Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;">Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;">Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;">Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;">Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table> <p>4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).</p>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input checked="" type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
<input checked="" type="checkbox"/>	Box No. I	Basis of the report																							
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<input type="checkbox"/>	Box No. VII	Certain defects in the international application																							
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application																							

<p>The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No. +41 22 740 14 35</p>	<p>Date of issuance of this report 13 February 2006 (13.02.2006)</p> <p>Authorized officer <b>Idhir Britel</b></p> <p>Telephone No. +41 22 338 70 60</p>
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# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

REC'D 01 NOV 2004  
**PCT**  
WIPO PCT

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Applicant's or agent's file reference see form PCT/ISA/220		Date of mailing (day/month/year) see form PCT/ISA/210 (second sheet)	
International application No. PCT/B2004/051353	International filing date (day/month/year) 02.08.2004	Priority date (day/month/year) 08.08.2003	
International Patent Classification (IPC) or both national classification and IPC H04B5/00, G08C17/04			
Applicant KONINKLIJKE PHILIPS ELECTRONICS N.V.			

**1. This opinion contains indications relating to the following items:**

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

**3. For further details, see notes to Form PCT/ISA/220.**

Name and mailing address of the ISA:



European Patent Office - P.B. 5818 Patentlaan 2  
NL-2280 HV Rijswijk - Pays Bas  
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**Box No. I Basis of the opinion**

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
 This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:  
 a sequence listing  
 table(s) related to the sequence listing
  - b. format of material:  
 in written format  
 in computer readable form
  - c. time of filing/furnishing:  
 contained in the international application as filed.  
 filed together with the international application in computer readable form.  
 furnished subsequently to this Authority for the purposes of search.
3.  In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/IB2004/051353

**Box No. II Priority**

1.  The following document has not been furnished:

copy of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(a)).  
 translation of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2.  This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or  
industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	1-9
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-9
Industrial applicability (IA)	Yes: Claims	1-9
	No: Claims	

2. Citations and explanations

see separate sheet

**Re Item V.**

1. The following documents are referred to in this communication:  
D1 : US 5 293 400 A (MONOD MARIE-ODILE ET AL) 8 March 1994 (1994-03-08)  
D2 : WO 95/07521 A (RENISHAW PLC ; THOMAS DAVID KENNETH (GB)) 16  
March 1995 (1995-03-16)  
D3 : GB 2 153 410 A (LICENTIA GMBH) 21 August 1985 (1985-08-21)
2. INDEPENDENT CLAIM 1
  - 2.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject matter of claim 1 does not involve an inventive step in the sense of Article 33(3)PCT.
  - 2.2 Document D1, which is considered to represent the most relevant state of the art to the subject matter of claim 1, discloses (the references in parenthesis applying to this document): an inductive transmission system for inductive transmission of power and full duplex data signals between a first device and a second device, comprising a bi-directional inductive channel between the first and the second device, first transmission means for transmitting a power signal at a first frequency from the first device to the second device over the inductive channel; first and second modulation devices for modulating first and second data signals and second transmission means for transmitting the modulated first data signals from the first device to the second device and the modulated second data signals from the second device to the first device both over the inductive channel; wherein the transmission system furthermore comprises detection means and signal cancellation means for cancellation of the first data signal respectively second data signal from the transmitted second data signal respectively transmitted first data signal at the first device side respectively second device side (abstract; column 1, lines 7 to 15 and 42 to 48; column 2, line 35 to column 3, line 10; column 3, lines 36 to 50; column 4, lines 12 to 57; column 5, lines 38 to 65; column 7, lines 18 to 20 and figure 1).
  - 2.3 The subject-matter of independent claim 1 differs from the disclosure of D1 in that the first and second signals are modulated respectively at a first and second frequencies which are different and spaced at least a factor of two apart.

2.4 The system disclosed in D1 does not describe the use of two different modulation frequencies, however it does not exclude this possibility as it is clear from its description, page 7, lines 18 to 20. Moreover D1 appears to provide the same advantages as the present application, full duplex bi-directional data transmission at high rates (column 3, lines 3 to 10).

2.5 The use of two different modulation frequencies for bi-directional transmission of data signals with inductive coupling is well known in the prior art. D2, cited by the applicant and D3 disclosed similar systems for duplex data transmission with inductive coupling where two frequencies, spaced apart at least a factor two, are used for modulating data signals on each direction. It would be obvious to the person skilled in the art, namely when the same result is to be achieved, to apply these features with corresponding effect to a system according to document D1, thereby arriving at a system according to claim 1 (D2: abstract; page 4, line 3 to page 5, line 6; page 5, line 34 to page 6, line 12; page 8, line 28 to page 9, line 2; page 12, line 14 to page 13 line 10; figures 3 to 7; D3: abstract; page 1, lines 96 to 108; page 1, line 123 to page 2, line 41; figures 1 and 3).

2.6 The proposed solution in independent claim 1 thus cannot be considered inventive (Article 33(3) PCT). Following a similar reasoning it is concluded that the subject-matter of the corresponding method claim 7 does not involve an inventive step either.

3. **DEPENDENT CLAIMS 2-6, 8, 9**  
Dependent claims 2-6, 8, 9 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT) (D1: abstract; column 1, lines 7 to 15 and 42 to 48; column 2, line 35 to column 3, line 10; column 3, lines 36 to 50; column 4, lines 12 to 57; column 5, lines 38 to 65; column 7, lines 18 to 20 and figure 1; D2: abstract; page 4, line 3 to page 5, line 6; page 5, line 34 to page 6, line 12; page 8, line 28 to page 9, line 2; page 12, line 14 to page 13 line 10; figures 3 to 7; D3: abstract; page 1, lines 96 to 108; page 1, line 123 to page 2, line 41; figures 1 and 3).